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Pumice and Pumicite

UNITED STATES DEPARTMENT OF THE INTERIOR

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Pumice and Pumicite

By Arthur C. Meisinger[1]

Domestic production for pumice and pumicite declined 29% in quantity and 22% in value compared with 1986 production. Imports for consumption of pumice also declined 29%, reflecting the weakened U.S. demand for pumice aggregate in concrete construction products. Greece continued to be the major source of pumice imports with 83%.

Domestic Data Coverage.—Domestic production data for pumice and pumicite are developed by the Bureau of Mines from one voluntary survey of U.S. operations. Of the 24 operations to which a survey request was sent, 19, or 79%, responded, of which 15 were active and represented 95% of total production data shown in table 1. Production for the remaining nonrespondents was estimated using reported prior year data adjusted by trends in employment and other guidelines.

Table 1.—Salient pumice and pumicite statistics

(Thousand short tons and thousand dollars unless otherwise specified)

	1983	1984	1985	1986	1987
United States: Sold and used by producers:					
Pumice and pumicite	449	502	508	554	392
Value (f.o.b. mine and/or mill)	$4,486	$4,929	$4,553	$5,756	$4,493
Average value per ton	$9.99	$9.82	$8.96	$10.39	$11.46
Exports[e]	1	1	1	1	1
Imports for consumption	184	293	242	385	272
Consumption, apparent[1]	632	794	749	938	663
World: Production, pumice and related volcanic materials	r12,681	r12,800	11,825	p11,458	e11,753

[e]Estimated. [p]Preliminary. [r]Revised.

[1]Production plus imports, minus exports, plus adjustments for Government and industry stock changes.

DOMESTIC PRODUCTION

Production of pumice and pumicite by domestic producers dropped to its lowest level in 5 years, a decrease of 29% from that of 1986. Value of production declined 22%. Lower market demand for concrete-aggregate-size pumice, primarily from New Mexico operations, contributed significantly to the large decline in domestic output. Twenty mines and/or mills were operated by 18 companies in 7 States, with California, Idaho, New Mexico, and Oregon accounting for 95% of U.S. production.

Principal domestic producers were Glass Mountain Pumice Inc. (formerly Tionesta Aggregates Co.), Tulelake, CA; Hess Pumice Products, Malad City, ID; Producers Pumice Inc., Boise, ID; Copar Pumice Co. Inc., Santa Fe, NM; General Pumice Corp., Santa Fe, NM; Utility Block Co., Albuquerque, NM; Cascade Pumice Co., Bend, OR; and Central Oregon Pumice Co., Bend, OR. Together, these eight companies accounted for 89% of the tonnage and 63% of the value of U.S. pumice and pumicite production.

Table 2.—Pumice and pumicite sold and used by producers in the United States, by State

(Thousand short tons and thousand dollars)

State	1986		1987	
	Quantity	Value	Quantity	Value
Arizona	2	30	1	7
California	46	1,263	42	1,539
New Mexico	255	2,370	87	991
Other[1]	251	2,094	262	1,956
Total	554	[2]5,756	392	4,493

[1]Includes Hawaii, Idaho, Kansas, Oklahoma (1986), and Oregon.
[2]Data do not add to total shown because of independent rounding.

CONSUMPTION AND USES

U.S. apparent consumption decreased 29% compared with that of 1986. The principal domestic use of pumice as aggregate in concrete products for the construction market declined significantly from 697,000 short tons sold and used in 1986 to 376,000 tons. Weaker local market demands and higher priced imported pumice contributed largely to the decline in consumption.

Pumice and pumicite used as abrasives increased 71%, primarily owing to the large demand for washing designer jeans. Pumice for use as decorative building block increased 15%, partly owing to several producers switching production from aggregate to block for the higher priced block market. Landscaping and other uses had slight sales decreases during the year.

Table 3.—Pumice and pumicite sold and used by producers in the United States, by use

(Thousand short tons and thousand dollars)

Use	1986		1987	
	Quantity	Value	Quantity	Value
Abrasives (includes cleaning and scouring compounds)	17	517	29	719
Concrete admixture and aggregate	316	2,258	122	622
Decorative building block	168	1,893	194	2,295
Landscaping	22	196	19	195
Other[1]	31	892	28	662
Total	554	5,756	392	4,493

[1]Includes heat-or-cold insulating medium, pesticide carriers, road construction material, roofing granules, and miscellaneous uses.

PRICES

The average value, f.o.b. mine or mill, for domestic pumice and pumicite sold and used was $11.46 per ton, a 10% increase compared with the 1986 value. The increase was due to the greater demand for higher priced block pumice.

Prices quoted in Chemical Marketing Reporter remained unchanged from those of 1986 for domestic grades of pumice bagged in 1-ton lots and were, at yearend, $270 per ton for fine and $300 per ton for medium, coarse, and 2-extra coarse. Yearend quoted prices on imported (Italian) pumice, f.o.b. east coast, bagged in 1-ton lots, were $280 per ton for fine, $350 per ton for medium, and $300 per ton for coarse.

The average declared customs value of pumice imported from Greece for use in concrete masonry products increased 28% from $6.87 per ton in 1986 to $8.81 per ton.

FOREIGN TRADE

Pumice imported for consumption decreased 29% compared with that of 1986. Pumice imports for use in concrete masonry products declined one-third from 381,000 tons in 1986 to 254,000 tons, owing to a weakened U.S. market for concrete aggregate pumice and an increase of $4.55 per ton over the 1986 import price.

[1]Industry economist, Branch of Industrial Minerals.

Table 4.—U.S. imports for consumption of pumice, by class and country

Country	Crude or unmanufactured		Wholly or partly manufactured		For use in the manufacture of concrete masonry products		Manufactured, n.s.p.f.
	Quantity (short tons)	Value (thousands)	Quantity (short tons)	Value (thousands)	Quantity (short tons)	Value (thousands)	Value (thousands)
1986:							
Ecuador	645	$54	--	--	--	--	--
Greece	2,555	162	24	$10	352,076	2,418	--
Iceland	177	38	--	--	--	--	--
Italy	83	22	464	163	22,047	166	$178
Mexico	--	--	--	--	6,965	183	5
Other[1]	28	21	21	31	3	9	329
Total	3,488	297	509	204	381,091	2,776	512
1987:							
Ecuador	--	--	--	--	1,588	83	--
Greece	2,402	449	170	51	222,048	1,957	155
Guatemala	3,762	301	264	22	--	--	6
Iceland	332	81	--	--	--	--	--
Italy	42	19	632	201	22,050	235	189
Mexico	7,536	899	--	--	7,051	589	81
Turkey	2,906	512	41	14	683	127	8
Other[2]	373	153	94	92	173	9	460
Total	17,353	2,414	1,201	380	253,593	3,000	899

[1]Includes Austria, Canada, Denmark, France, the Federal Republic of Germany, Hong Kong, Iran, Ireland, Japan, the Netherlands, Niger, Spain, Taiwan, and the United Kingdom.
[2]Includes Australia, Brazil, Canada, France, the Federal Republic of Germany, Indonesia, Japan, the Republic of Korea, the Netherlands, Norway, Singapore, Spain, Taiwan, and the United Kingdom.

Source: Bureau of the Census.

Table 5.—Pumice and related volcanic materials: World production, by country[1]

(Thousand short tons)

Country[2]	1983	1984	1985	1986[p]	1987[e]
Argentina[3]	76	60	15	17	18
Austria: Trass	3	11	8	6	7
Cameroon: Pozzolan	NA	NA	116	186	190
Cape Verde Islands: Pozzolan[e]	11	11	11	11	11
Chile: Pozzolan	192	190	227	245	220
Costa Rica[e]	2	2	2	2	2
Dominica: Pumice and volcanic ash[e]	120	120	120	120	110
France: Pozzolan and lapilli	669	551	547	452	500
Germany, Federal Republic of: Pumice (marketable)	243	[r]386	228	237	190
Greece:					
Pumice	552	691	684	[e]690	690
Pozzolan	1,004	1,001	1,034	[e]1,050	1,040
Guadeloupe: Pozzolan[e]	265	275	240	[r]241	243
Guatemala:					
Pumice	17	[e]15	13	12	13
Volcanic ash	(4)	(4)	--	--	--
Iceland	50	61	62	58	55
Italy:					
Pumice and pumiceous lapilli	[r]1,026	[r]995	[e]825	[e]770	800
Pozzolan	[r]6,162	[r]6,296	[e]5,500	[e]5,000	5,500

See footnotes at end of table.

Table 5.—Pumice and related volcanic materials: World production, by country[1] —Continued

(Thousand short tons)

Country[2]	1983	1984	1985	1986[p]	1987[e]
Martinique: Pumice[e]	160	150	165	155	145
New Zealand	19	17	[e]22	[e]22	17
Spain[5]	1,105	915	936	1,067	1,050
United States (sold and used by producers)	449	502	508	554	[e]282
Yugoslavia: Volcanic tuff	556	[r]551	562	[e]560	560
Total	[r]12,681	[r]12,800	11,825	11,458	11,753

[e]Estimated. [p]Preliminary. [r]Revised. NA Not available.

[1]Table includes data available through May 20, 1988.

[2]Pumice and related volcanic materials are also produced in a number of other countries, including (but not limited to) Ethiopia, Iran, Japan, Mexico, Turkey, and the U.S.S.R., but output is not reported quantitatively, and available information is inadequate for the formulation of reliable estimates of output levels.

[3]Unspecified volcanic materials produced mainly for use in construction products.

[4]Less than 1/2 unit.

[5]Includes Canary Islands.

[6]Reported figure.

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